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PROMOTE PROTECT PROSPER

South Carolina Department of Health
and Environmental Control

National Pollutant Discharge Elimination System Permit

for Discharge to Surface Waters

This permit certifies that

City of Columbia

has been granted permission to discharge storm water from the municipal separate storm sewer system located in

Richland and Lexington Counties, South Carolina

to all receiving waters in the State of South Carolina

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, III, IV and V hereof. This permit is issued in accordance with the provisions of the Pollution Control Act of South Carolina (S.C. Code Sections 48-1-10 *et seq*., 1976), Regulation 61-9 and with the provisions of the Federal Clean Water Act (PL 92-500), as amended, 33 U.S.C. 1251 *et seq*., the "Act."

Ann R. Clark, Director
Outreach, Storm Water, Agricultural and Dams Permitting Division
Bureau of Water

Issued: January 8, 2010 **Expires: January 24, 2015**

Effective: January 25, 2010 **Permit No.:** SCS790001

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NPDES PERMIT NUMBER: SCS790001
CITY OF COLUMBIA, SOUTH CAROLINA
MUNICIPAL SEPARATE STORM SEWER SYSTEM

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I. PART I. - DISCHARGES AUTHORIZED UNDER THIS PERMIT

A. PERMIT AREA.

This National Pollutant Discharge Elimination System (NPDES) permit covers all areas located within the political boundary of the State of South Carolina served by Municipal Separate Storm Sewer Systems (MS4) owned or operated by the Permittee identified in Part I.C.

B. AUTHORIZED DISCHARGES.

Except for discharges prohibited under Part I.D., this permit authorizes all existing or new storm water point source discharges to waters of the State of South Carolina from those portions of the (MS4) owned or operated by the Permittee. Discharge of pollutants shall achieve the "effective prohibition" and "maximum extent practicable or MEP" standards from Section 402(p)(3)(B) of the Clean Water Act, shall not cause, nor contribute to, violations of South Carolina Water Quality Standards, and shall be in compliance with Total Maximum Daily Loads (TMDL) where applicable.

C. PERMITTEE.

The following entities are the Permittee(s) subject to the conditions of this permit:

City of Columbia

References to "Permittee" in this permit mean the list of entities identified in Part I.C.

1. The Permittee is responsible for:

a. Compliance with permit conditions relating to discharges from portions of the MS4 where the Permittee is the operator;

b. Storm water management program (SWMP) implementation on portions of the MS4 where either, the Permittee is the operator, the owner, or the responsible party;

c. Where permit conditions are established for specific portions of the MS4, the Permittee need only comply with the permit conditions relating to those portions of the MS4 for which either, the Permittee is the owner, the operator, or the responsible party;

d. A plan of action to assume responsibility for implementing storm water management and monitoring programs on its portions of the MS4. (See Part II.H.3. of this permit also.); and

e. Assessment of proposed storm water controls for potential impacts to ground water.

2. **For all areas of the MS4 owned or operated by the Permittee, the Permittee is responsible for:**

   a. Submission of annual reporting requirements as specified in Part V.E. (ANNUAL REPORT);

   b. Collection of monitoring data as required by Parts V.A through V.D.;

   c. Ensuring implementation of system-wide management program elements, including any system-wide public education efforts.

3. **For all areas of the MS4 owned or operated by the Permittee, the Permittee is specifically responsible for permit compliance on portions of the MS4:**

   a. Where operational or SWMP implementation authority over portions of the MS4 exist; or,

   b. Where both the owner and the operator are jointly responsible for permit compliance on those portions of the MS4.

4. **The Permittee must supply, in the first annual report, a list of entities such as military bases, large hospitals, prison complexes, universities, sewer districts, highway departments and others that operate a separate storm sewer system and that are located within the MS4 boundaries**. An indication shall be made as to whether they are an integral part of the MS4.

D. LIMITATIONS ON COVERAGE.

Section 402(p)(3)(B)(ii) of the Clean Water Act specifically requires the South Carolina Department of Health and Environmental Control (SCDHEC) or the Department) to include within this permit an effective prohibition on non-storm water entering the MS4. The following discharges are not authorized by this permit:

1. **Non-Storm Water: discharges of non-storm water, except where such discharges are:**

   a. in compliance with a separate NPDES permit; or,

   b. identified by and in compliance with the City of Columbia Storm Water Ordinance as required by Part II.B.7 of this permit.

2. **Spills: discharges of material resulting from a spill, except where such discharges are:**

   a. the result of an Act of God where reasonable and prudent measures have been taken to minimize the impact of the discharge; or,

b. an emergency discharge required to prevent imminent threat to human health or prevent severe property damage, provided that reasonable and prudent measures have been taken to minimize the impact of the discharge.

II. STORM WATER MANAGEMENT PROGRAM (SWMP)

A. INTRODUCTION.

The Permittee shall, in accordance with the schedule in part III.B and / or deadlines included in the permit and /or the SWMP herein, develop a comprehensive SWMP that complies with the Phase I and Phase II storm water requirements (including the decision making process) including pollution prevention measures, treatment or removal techniques, storm water monitoring, use of legal authority, and other appropriate means to control the quality of storm water discharged from the MS4. The SWMP shall continue to be implemented in accordance with Section 402(p)(3)(B) of the Clean Water Act and South Carolina (SC) Regulation 61-9, Part 122.26; and be consistent with: SC Water Classifications and Standards (SC Regulation 61-68), SC Classified Waters (SC Regulation 61-69) Sections 48-1-10, et seq of the 1976 Code, and, with Storm Water Management and Sediment Reduction Act (SC Regulation 72-300) Chapter 14, Title 48, 1976 SC Code, as amended, or similarly applicable statute or city ordinance.

Controls and activities in the SWMP shall clearly define areas of Permittee jurisdiction, applicability, and responsibility on specific area basis. The SWMP shall include controls necessary to effectively prohibit the discharge of non-storm water into the MS4 and to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP). The SWMP shall be consistent with the SC Watershed Water Quality Management Strategy (see definition in Part VIII). Compliance with this SWMP shall be reported annually in the ANNUAL REPORT in Part V.E.

The SWMP shall cover the term of the permit and shall be updated as necessary, or as required by the SCDHEC, to ensure compliance with this statutory requirement of Clean Water Act Section 402(p)(3)(B). During the first year of the permit cycle, the Permittee will update the SWMP and develop programs, processes, and procedures necessary to implement the SWMP in the four (4) phases described in the table in Part III A. Once the SWMP is submitted, the measures and practices and their associated implementation schedules will become an enforceable permit condition, unless otherwise notified by SCDHEC in writing. Modifications to the SWMP shall be made in accordance with Part II.H of this permit. The SWMP, and its updates, submitted by the Permittee as scheduled in this permit, upon approval, shall be incorporated into this permit by reference and shall become permit conditions**.**

The SWMP shall include detailed measures and practices and associated implementation schedules in conformance with Part III.B for each of the categories of SWMP requirements in Part II.B. Once the SWMP is approved by SCDHEC, the measures and practices approved and their associated implementation schedules will become an enforceable permit condition.

This NPDES individual permit for a medium municipal separate storm sewer system (MS4) requires the Permittee to develop, implement, and enforce an SWMP designed to reduce the discharge of pollutants to the maximum extent practicable. The Permittee is expected to implement the SWMP elements; namely, *Structural Controls and Storm Water Collection System Operation, Areas of New Development and Significant Redevelopment, Existing Roadways, Flood Control Projects, Municipal waste treatment, storage, or disposal facilities, Application of Pesticides, Herbicides, and Fertilizers (PHFs), Illicit Discharges and Improper Disposal, Industrial and High Risk Runoff Facilities, Construction Site Storm Water Runoff Control, Monitoring Program*, and *Public Education and Public Participation*.

MEP will be determined through a series of steps associated with identification and implementation of the SWMP elements. SCDHEC Bureau of Water establishes requirements for each of the SWMP elements and requires the Permittee to identify the Best Management Practices (BMPs) to be performed and the measurable goals to be achieved. The Permittee is herein required to identify the BMPs and the associated measurable goals for addressing each of the elements in their SWMP.

SCDHEC Bureau of Water in conjunction with EPA Region IV have had the opportunity to review the application submitted by the Permittee to verify that the identified BMP and measurable goals in fact meet the MEP requirement. If necessary, SCDHEC Bureau of Water could ask the Permittee to revise the mix of BMPs to better reflect the requirement. This process will be followed by the actual SWMP implementation by the Permittee.

Implementation of BMP consistent with the SWMP pursuant to applicable provisions of SC Water Pollution Control Permits Regulation 61-9 122.26(d) or 122.34 required as a condition of this NPDES MS4 permit will require the Permittee to: develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from its MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act; include elements required under SC Water Pollution Control Permits Regulation 61-9 122.26(d); and, implement the controls to reduce the discharge of pollutants, including management practices, control techniques, and system, design and engineering methods and such other provisions as SCDHEC Bureau of Water determines appropriate for the control of such pollutants in order to constitute compliance with the standard of "reducing pollutants to the maximum extent practicable." The Permittee will propose the specific details in each of the SWMP elements that represent MEP through an evaluative and iterative process. In this process, SCDHEC Bureau of Water will determine whether reduction of pollutants to the MEP could be achieved with the identified BMP. SCDHEC Bureau of Water envisions that this process will consider such factors as conditions of receiving waters, specific local concerns, and other aspects included in the comprehensive watershed plan and will occur over several permit cycles. The SWMP performance will be evaluated against a MEP criteria including but not limited to: (1) The effectiveness to address the pollutant(s) of concern, (2) public acceptance, (3) cost, (4) technical feasibility, and (5) compliance with Federal, State, local laws and all applicable regulations.

For purposes of this permit, narrative effluent limitations requiring implementation of BMP are generally the most appropriate form of effluent limitations when designed to satisfy technology requirements (including reductions of pollutants to the MEP) and to protect water quality. SCDHEC Bureau of Water will specify a period of up to 5 years from the effective date for the Permittee to fully implement the SWMP in accordance to this permit.

B. SWMP REQUIREMENTS.

This permit constitutes the first MS4 permit term for the Permittee. The storm water monitoring, controls and management strategies contained herein are in keeping with the Part 1 and Part 2 NPDES Storm Water Phase I Application, dated June 7, 2002, as submitted to SCDHEC by the Permittee. That document summarizes the storm water management activities completed by the Permittee under their existing storm water management programs and proposes comprehensive storm water management activities for the permit term and should be consulted for additional information when interpreting the permit requirements contained herein. The SWMP and subsequent updates must be included in the annual report every year. The SWMP and the annual report shall be made available to the public.

1. Structural Controls and Storm Water Collection System Operation:

The MS4 and any storm water structural control shall be operated in a manner to reduce the discharge of pollutants to achieve the "effective prohibition" and "MEP" standards from Section 402(p)(3)(B) of the Clean Water Act. The Permittee listed in Part I.C. of this permit owns, operates, or is responsible for structural controls.

Within 18 months of the Effective Date of this permit, the Permittee shall have a program in place to include:

a. Implementation of structural controls.

b. Implementation of inspection and maintenance activities for structural controls held by the MS4, or privately owned systems as applicable, per a schedule for these activities in accordance to Parts II.2.F and III.B.

c. Inventory of existing structural controls, reasonably discoverable by the Permittee, for both private and those owned by the Permittee.

d. Identification of those existing facilities requiring repair and or maintenance pursuant to the schedule in Parts II.2.F and III.B.

e. Authority to require periodic inspection, maintenance and repair of existing privately owned structural controls.

f. A response mechanism for citizen's complaints, such as a hotline.

g. Assessment of policies, procedures, and regulatory requirements for implementation of site appropriate structural and non-structural controls.

Additional policies, procedures and regulatory requirements needed to review all structural controls during the approval process shall be developed and implemented through standard operating procedures (SOP).

h. Implementation of the design criteria stated in SC Regulation 72-300 and 61-9 that are applicable to the Structural Controls and Storm Water Collection System Operation element.

i. Adopt an ordinance

2. <u>Post-Construction Storm Water Management in New Development and Redevelopment</u>

a. The goal of the post-construction element is to protect receiving waters from the discharge of pollutants, after construction is completed, by reducing it to the MEP, to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act.

b. Within 18 months of the Effective Date of this permit, the Permittee shall have a program in place to address storm water runoff from new development and significant redevelopment projects that disturb greater than one acre, including projects that are less than one acre, but that are a part of a larger common plan. The program shall apply to private and public development, including roads.

c. The program should be designed and implemented with emphasis on watershed master planning, protecting wetlands, riparian areas, natural areas, stream corridors, and other critical water quality resource areas. The specific items listed below (items d. through g.) will be developed and implemented with consideration given to a variety of BMPs specifically selected to address pollutants of concern identified in the Part I and Part II application, approved TMDL within the boundaries of the regulated MS4, and the most current 303(d) list.

d. This Post-Construction storm water management element shall include:

Measurable goals for each of the four watersheds in part III.A. The Permittee shall develop quantifiable objectives for this element according to part III.B and identify them in the appropriate annual report.

Creation and implementation of design and development standards for post-construction controls consistent with the Structural Controls and Storm Water Collection System Operation, the Existing Roadways, the Flood Control Projects, and the Construction Site Storm Water Runoff Control elements of the SWMP requirements of this permit. These standards will have the overall goal of improving the quality of storm water runoff from the MS4 while placing emphasis on the following items, wherever feasible:

i. Minimizing the amount of impervious surfaces (roads, parking lots, roofs, etc)

ii. Preserving, protecting, creating and restoring ecologically sensitive areas that provide water quality benefits;

iii. Implementing storm water management practices that prevent or reduce adverse impacts to streams, including requiring vegetated buffers along waterways, and disconnecting discharges to surface waters from impervious surfaces such as parking lots;

iv. Seeking to avoid or prevent hydro modification of streams or other water bodies caused by development, including roads, highways, and bridges;

v. Implementing standards to protect trees, and other vegetation; and implementing policies to protect native soils, prevent topsoil stripping and prevent compaction of soils.

vi. Adopting and enforcing performance standards for flow control;

vii. Encouraging low impact development (LID) / Green Infrastructure. For example, green roofs; porous pavements, water harvesting devices such as rain barrels and cisterns; downspout disconnection, infiltration, evapotranspiration and capture and use measures. The Permittee shall provide for a reasonable suite of these types of practices to be legally implemented;

viii. Providing incentives for redevelopment or other activities for which environmental benefit can be demonstrated, and provisions for options such as off-site mitigation for sites where implementation of these standards should be included.

ix. Adding specific measurable standards in a post-construction ordinance for the design and development standards implemented per part II.B.2.D.b.i-vii (e.g. flow control standard, maintenance of pre-development hydrograph, minimum pervious surface percent, etc.)

x. If design and development standards are not developed to include these items, then an alternative with a rationale for each item to be technically and legally implemented shall be reported according to Part II.H.

e. Develop project review, approval, compliance, and enforcement requirements and procedures that shall apply, at a minimum, to all new development and re-development disturbing one acre or more, including projects less than one acre that are a part of a larger common plan of development or sale. Where necessary, the Permittee shall adopt or revise ordinances to reasonably ensure the applicability and enforceability of such requirements and procedures at all new and redevelopment sites. The procedures shall include:

i. Development of procedures for site plan review and approval process(es) that include inter-departmental consultations, as needed, and a required re-approval process when changes to an approved plan are desired.

ii. Post-construction inspection process to ensure that standards are being met. That includes enforceable procedures for bringing noncompliant projects into compliance; and

iii. A requirement that legally enforceable arrangements are made by owners / operators of new or redevelopment sites for the long-term maintenance and operation of stormwater controls at their sites; and that the Permittee is notified of changes in the responsible party for long-term maintenance.

f. Develop requirements for long-term operation and maintenance of structural post-construction storm water quality controls. The long-term operation and maintenance program will include a maintenance schedule for City owned BMP and a mechanism for tracking maintenance performed on such BMP. The program will also provide a mechanism to ensure long-term operation and maintenance of privately owned BMP. These procedures shall include:

i. All newly approved post construction storm water quality controls shall be scheduled for inspection and maintenance as frequently as necessary to demonstrate proper performance but in no case less than once a year once initially inspected.

ii. A schedule to demonstrate proper performance of post-construction storm water quality controls to the MEP, of all new and significantly redeveloped projects and those owned by the Permittee. The schedule shall include the number and frequency of inspections and maintenance of the controls and must be included in the year 4 report as required in parts III.B and VI.C of this permit.

g. The Permittee shall document compliance with the requirements for post-construction controls by summarizing the following in the annual report.

i. Annual reports must include status of implementation of these items with respect to incorporation into relevant documents and implementation via relevant policies. Reports shall include proposed time frames, changes and measurable goals.

ii. A summary of the number and types of new and redevelopment projects that the Permittee reviewed to include the number and type of management practices installed.

iii. A summary of management practice maintenance inspections conducted by the Permittee, including a summary of the number requiring maintenance or repair, the number brought into compliance within stipulated timeframe, and the number of enforcement actions taken.

iv. A summary of any changes to local ordinances to implement the standards outlined in this section.

v. The Permittee shall track and maintain records of post-construction review, approval, compliance and enforcement activities. A summary of this information shall be included in the Permittee's annual report.

3. Existing Roadways

Public streets, roads, and highways, including but not limited to unpaved roads, shall be operated and maintained in a manner to reduce to the MEP the discharge of pollutants, including those pollutants related to deicing or sanding activities.

Within 18 months of the Effective Date of this permit, the Permittee shall have a program in place to include:

a. Road Maintenance:

The Permittee shall develop and implement policies, procedures, or regulatory requirements for the use of structural and nonstructural controls, and shall revise maintenance activities as appropriate to minimize the amount of pollutants that are captured in the storm water runoff from roadways. Regular inspection and maintenance of these structures in accordance to Parts II.2.F and III.B as well as the periodic disposal of trash will be part of these activities.

b. Road Construction:

All Permittee crews and hired contractors shall address storm water quality issues when performing construction activities within right-of-ways. A road construction SOP that includes water quality BMP must be implemented.

c. Road Encroachments:

Spill prevention, material management practices, and good housekeeping shall be considered when issuing encroachment permits.

d. Implementation of the design criteria stated in SC Regulation 72-300 and 61-9 that are applicable to this *Existing Roadways* element.

4. Flood Control Projects

When storm water conveyance upgrades and other capital improvements to the storm sewer system are defined as a result of watershed planning (or equivalent) the Permittee shall include an assessment of water quality impacts. Take into consideration any impaired water bodies identified under Section 303(d), whether or not addressed by a TMDL, when master plans (or equivalent) are created or revised. For storm water infrastructure projects proposed in watersheds that drain to impaired water bodies, an assessment of impacts to water quality caused by the discharge of parameter(s) of concern shall be considered in the development of the project.

Within 18 months of the Effective Date of this permit, the Permittee shall have a program in place to include:

a. Policies, procedures, or regulatory requirements, as necessary, to address water quality issues when retrofitting existing flood control structures.

b. Procedures that incorporate these ideas into the planning stages of any new or existing flood control project. Additionally, the Permittee shall assess water quality impacts on receiving water for all flood management projects identified in the watershed planning process (or equivalent).

c. Implementation of the design criteria stated in SC Regulation 72-300 that are applicable to this *Flood Control Projects* element.

5. Municipal Waste Treatment, Storage, or Disposal Facilities Not Covered by an NPDES Storm Water Permit

The Permittee shall implement the specific activities for Industrial Runoff in item II.B.8, below on or before the implemented date prescribed in the SWMP Implementation Schedule in Part III B.

a. Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations as an integral part of the SWMP;

b. Identify all facilities, prioritize their periodic inspection and implement good housekeeping practices; and,

c. Using training materials that are available from SCDHEC, EPA, or other organizations, include in your program employee training to prevent and reduce storm water pollution from all municipal activities such as park and open space maintenance, new construction and land disturbances, and storm water system maintenance among others.

6. Pesticide, Herbicide, and Fertilizers (PHFs) Application

Within 18 months of the Effective Date of this permit, the Permittee shall develop an education and public awareness program for the general public, city landscaping staff, and commercial applicators to teach the proper use of pesticides and fertilizers.

Should there be an identified impairment potentially caused by PHF application, there may be additional activities to be carried by the Permittee to abate the source to the MEP.

7. Illicit Discharges and Improper Disposal

Within 18 months of the Effective Date of this permit, the Permittee shall develop and implement a program, including a schedule, to detect and remove (or require the discharger to the MS4 to apply for a separate NPDES permit for) illicit discharges and improper disposal into the storm sewer. The proposed program shall include provisions for the following:

a. Inspection, Ordinances, and Enforcement Measures:

Within 18 months of the Effective Date of this permit, the Permittee shall update the Storm Water Ordinance to enable inspection and enforcement measures to achieve the effective prohibition required under section 402(p)(3)(B)(ii) of the Clean Water Act.

b. Dry Weather Field Screening Program:

The Permittee shall have a program in place to include:

i. Field screening of all outfalls discharging from the MS4, at least once per permit term per Part III.B:

ii. Testing; and

iii. Recording of collected field screening data.

c. Investigation and Elimination of Suspected Illicit and/or Improper Disposal:

The Permittee shall develop and implement standard procedures to be followed to investigate portions of the MS4 that, based on the results of the field screen or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water.

The Permittee shall have a program in place to include:

i. Identification and tracking of illicit discharges in identified watershed areas;

ii. Recording citizen complaints;

iii. A response mechanism for citizen complaints, such as a hot line to report suspected illicit discharges and improper disposal;

iv. Field-screening and citizen complaint follow-up.

v. Permittee shall address all identified instances of illicit connections and improper disposal as soon as possible but no later than 10 days from source identification.

vi. When, and if, elimination will take longer than 10 days, Permittee shall require the responsible party to submit a plan with a schedule for elimination that meets the ASAP standard in II.B.7.c.v, above.

d. Spill Prevention and Response:

The Permittee shall develop and implement procedures to prevent, contain, and respond to spills that may discharge into the MS4 in a manner that effectively mitigates potential pollutant discharges to surface or ground waters.

The Permittee shall have a program in place to include:

i. Review and summary of all existing spill prevention and response programs within the jurisdiction of the Permittee, including the Permittee's Hazardous Material Contingency Plan. Agency and organizational responsibilities should also be identified and summarized.

ii. Coordination and/or cooperative activities and program supplements as necessary.

iii. Training of appropriate personnel in spill prevention and response procedures and in techniques to mitigate pollutant discharges from spills to the MS4, surface waters, or ground water. Personnel shall be trained to recognize and timely assess the nature of spills and to promptly report all spills to the appropriate authority.

iv. Provide maps of the MS4 area to response agencies as requested.

e. Oils, Toxics, and Household Hazardous Waste Control:

The Permittee shall prohibit to the MEP the discharge or disposal of used motor vehicle fluids, and household hazardous wastes, into the MS4. The Permittee shall have a program in place to include implementation of a public outreach program.

f. Detection and Elimination of Sanitary Sewage and Septage Seepage in the MS4:

Controls must be in place to limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewer systems wherever applicable. The Permittee shall implement the program, as described in the SWMP, to limit the infiltration of sanitary seepage into the MS4. Where the Permittee has authority over the sewer collection system, the Permittee shall implement the Sanitary Sewer Seepage and Infiltration Control Program and the Illicit Discharge Detection and Elimination program as required herein.

8. Industrial Runoff

The Permittee shall develop and implement a program to monitor and control pollutants in storm water discharges through inspection, monitoring and enforcement to the MS4 from landfills; hazardous waste treatment, storage, disposal and recovery facilities (TSDs); facilities that are subject to the requirements of the Emergency Planning and Community Right to Know Act (EPCRA) Title III, Section 313; and any other industrial facilities, including City owned facilities, which the Permittee determines has the potential to contribute substantial pollutant loadings to the MS4. Within 18 months of the Effective Date of this permit, the Permittee shall have a program in place, including any necessary ordinance, to:

a. Identify priorities and procedures for inspections:

Identify all targeted facilities and determine priority sites to be inspected for determination of NPDES storm water permit compliance and / or compliance with the Permittee's Industrial Runoff Control Program requirements. Also, the Permittee shall provide a listing in each ANNUAL REPORT of additionally identified industrial facilities which discharge storm water into the MS4 which have not been previously reported. Not only storm water discharges from the eleven (11) categories of industrial activity identified in SC Regulation 61-9 122.26(b)(14), but also those facilities not subject to NPDES permitting requirements that the Permittee determines to have the reasonable potential to contribute substantial pollutant loadings to the MS4 must be included as required in parts III.B and VI.C of this permit.

b. The Permittee shall have a program in place to include:

i. A city wide inventory of all facilities identified in Part 8.a above to be submitted the first annual report. This inventory will be updated with new and removed facilities. Updates, citizen complaints and incidents of non-compliance shall be included in each annual report.

ii. Necessary follow-up activities for the facility inspection program to ensure the control of identified pollution sources through NPDES, or MS4 means. The Permittee shall perform periodic inspections of all facilities. The City shall maintain records of inspections and enforcement.

iii. Inspect all sites until 100% of all sites are inspected at least once during the first permit term.

iv. A schedule with city-wide prioritization of the number and frequency of inspections all facilities identified in Part 8.a. must be included in the year 4 report as required in parts III.B and VI.C of this permit

v. An annual Industrial Operators Training Course to educate and inform local industries of appropriate storm water controls and pollution prevention activities. Enhance as necessary.

c. Review of Storm Water Pollution Prevention Plans for Industries: The Permittee shall have a program in place to include the following:

i. Review of storm water pollution prevention plans for priority facilities and create a SOP regarding spill, complaints, un-permitted discharges and other violations. Permittee must implement a method to notify SCDHEC Bureau of Water of suspected noncompliance with NPDES permitted facilities or those that may be required by SCDHEC to have a permit but do not.

ii. Legal authority necessary to perform inspections and to enforce any penalties and/or fines necessary to comply with the requirements of this NPDES permit.

9. Construction Site Storm Water Runoff Control

The Permittee shall implement a program, including any necessary ordinance, to reduce erosion and sedimentation at construction sites such that sediment is retained on-site to the MEP within 18 months of the Effective Date of this permit. All Stormwater management and sediment/erosion control plans shall adhere to the standards set forth in 48-1-10, et seq, S.C. Code of Laws, 1976, SC Water Classifications and Standards, (SC Regulation 61-68 and 61-69), Water Pollution Control Permits (Chapter 10 Title 48 of the Code of Laws of South Carolina)(SC Regulation 61-9), and in the SC Storm Water Management and Sediment Reduction Regulations Chapter 72 and Chapter 14 Title 48 of the Code of Laws of South Carolina.

a. Site Planning and Non-structural & Structural Best Management Practices: Specific activities to be completed under this item are:

   i. Develop a Design Manual to be utilized by plan preparers and designers submitting plans for review to the Permittee. The Design Manual shall include Water Quality Protection BMP, as appropriate.

   ii. Ensure plan reviewers are either qualified professionals as defined in South Carolina Regulation 72-300 and 61-9 or have completed, and become certified through, a plan reviewer course acceptable to the SCDHEC.

   iii. Develop and implement procedures for site plan review for all sites that disturb 1 acre or more. Additionally, identify potential water quality impacts that the discharge of pollutant(s) of concern to TMDL waters and to waters on the South Carolina 303(d) List of Impaired Waters may have. The Pollution Prevention Plan shall limit sediment discharges and protect water quality to the MEP and shall include an assessment showing that the BMPs selected will control the construction and post-construction storm water discharges such that the storm water discharges will not cause or contribute to a violation of water quality standards.

   iv. An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to enforce compliance with the effective prohibition of 402(p)(3)(B)(ii) of the CWA including stop work orders, penalties, and / or holding of occupancy permits.

   v. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.

b. Inspection and Enforcement:

   Specific activities to be completed under this item are:

   i. Develop, implement, and use a permit tracking system. The system should

track a project from plan review to final stabilization. This includes inspection and enforcement activities. The tracking system should enable the Permittee to develop a list of ongoing facilities and to prioritize them for inspection. It should also include a mechanism to transition the tracking of operation and maintenance of storm water controls from the construction program to the post construction program.

ii. Develop and implement a SOP for inspections and escalation of enforcement. Specify the minimum number of inspections that will be performed during the term of the permit and establish progressive goals regarding the number of sites to be inspected.

iii. All new approvals must be inspected initially within the first two weeks of commencement of land disturbing activity.

iv. A response mechanism must be provided to report citizen complaints, such as a hotline. Response time to the complainant shall be no later than two business days and, if appropriate, site visit no later than three business days from initial complaint.

v. All active sites shall be inspected at least monthly during construction.

vi. All inspection and enforcement data shall be thoroughly documented in the tracking system.

vii. Ensure that the Permittee's inspectors are either qualified professionals as defined in South Carolina Regulation 72-300 or 61-9 or have completed, and become certified through, an erosion prevention and sediment control inspector course acceptable to the SCDHEC.

c. Site Operator Training:

Provide training to construction site operators to emphasize the importance of the proper installation and maintenance of sediment controls. Develop and implement an effective communication process with construction contractors to educate them on areas in which improvements are needed and to enforce any required actions. Permittee should offer periodic training every two years.

d. Decision process.

The City must document its decision process for the development of the Construction Site Storm Water Runoff Control program. Such documentation may be included in the City SWMP or in the annual report submitted pursuant to Section 5 of this permit. The City must develop a rationale statement that addresses the overall construction site storm water control program and the individual BMP, measurable goals, and responsible persons for the program. The rationale statement must include the following information, at a minimum:

i. The mechanism (ordinance or other regulatory mechanism) that will be used to require erosion and sediment controls at construction sites and why that mechanism was chosen. If there is a need to develop the mechanism, describe the plan and a schedule to do so. If the ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your SWMP description.

ii. The SOP to ensure compliance with the erosion and sediment control regulatory mechanism, including the sanctions and enforcement mechanisms that will be used to ensure compliance. Describe the procedures for when certain sanctions will be used. Possible sanctions include non-monetary penalties (such a stop work orders), fines, bonding requirements, and/or permit denials for non-compliance.

iii. Requirements for construction site operators to implement appropriate erosion and sediment control BMP and control waste at construction sites that may cause adverse impacts to water quality. Such waste includes discarded building materials, concrete truck washouts, chemicals, litter, and sanitary waste. Procedures for plan review, including the review of pre-construction site plans, which incorporate consideration of potential water quality impacts. For construction projects that disturb 1 acre or more and discharge the pollutant or pollutants of concern to a water on the South Carolina 303(d) List of Impaired Waters, the Stormwater Pollution Prevention Plans prepared by applicants for construction sites that City of Columbia reviews and approves must limit sediment discharge and must contain a written quantitative and qualitative assessment showing that the BMP selected will control the construction and post construction stormwater discharges so that the stormwater discharges will not have reasonable potential to cause or contribute to a violation of water quality standards.

A copy of the most current 303(d) List of Impaired Waters can be obtained from:

Water Quality Division
Bureau of Water
SCDHEC
2600 Bull Street
Columbia, SC 29201

iv. Your procedures for receipt and consideration of information submitted by the public. Consider coordinating this requirement with your public education program.

v. Your SOP for site inspection and enforcement of control measures, including how you will prioritize sites for inspection

vi. Who is responsible for overall management and implementation of your construction site storm water control program and, if different, who is responsible for each of the BMPs identified for this program.

vii. Describe how you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

e. The Permittee will begin implementation of the design criteria stated in SC Regulation 72-300 and 61-9 which are applicable to the *Construction Site Storm Water Runoff Control* element.

f. Develop procedures for receipt and consideration of information submitted by the public.

10. Monitoring Program

The Permittee shall implement the monitoring program as described in detail in Part V of this permit. In addition, the program shall incorporate monitoring requirements identified in Part II.B.7.b and in Part IV, if applicable.

11. Public Education and Outreach on Storm Water Impacts and Public Involvement / Participation

Within 18 months of the Effective Date of this permit, the Permittee shall have an ongoing program in place throughout the permit term to include:

a. A public education program to distribute educational materials or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff. Additional information can be obtained from the SCDHEC Storm Water Phase II Outreach Resource Website.

b. The Permittee must document the decision process for the development of a storm water public education and outreach program in the annual report submitted pursuant to part V.E. of this permit.

c. Implementation of a Public Education and Outreach program on Storm Water Impacts. Enhance and modify as necessary.

d. A comprehensive training program for Permittee employees on the implementation of this SWMP.

e. Provide designer training for plan reviewers, construction inspectors and the design community with emphasis on post-construction water quality BMP planning, design, construction and maintenance. This must include BMP design and use as well as sediment loss prevention.

f. Implementation of a public education program regarding used oil recycling and household hazardous waste programs as described in Item II.B.7.e, above. Illicit

discharge awareness and a response mechanism must be provided to report citizen complaints, such as a hotline

g. Development and implementation of the public education and outreach program on storm water impacts, and the public involvement/participation programs to encourage the public to reduce their use of pesticides, herbicides, and fertilizers. The program may include Carolina Yards and Neighborhoods, Home·A·Syst or equivalent programs which assist homeowners in minimizing residential use of pesticides & herbicides and in improving landscape design and maintenance to protect the environment and restore native habitats and a yard waste component. The program may include placing brochures/pamphlets prepared on these pertinent topics in public buildings for distribution to the residents and publishing a semi-annual article/notice in a community newsletter announcing the availability of these materials and providing tips for homeowners of ways to reduce their use of pesticides, herbicides and fertilizers. If utilizing public employee applicators, training can be accomplished through the Clemson University Department of Pesticide Regulation.

h. The Permittee shall develop a program to address domestic animal waste. Pet owners and others must be educated about the adverse impact this source, once transported via runoff, may have on water quality. The Permittee will work with pet owners, homeowners associations, or others as it may be appropriate to incorporate a storm water quality message to minimize the storm water pollution potential associated with animal waste. Resources may be obtained from EPA and SCDHEC.

   The Animal Waste component of the Public Education & Public Participation program will be outlined in the first ANNUAL REPORT and implemented in each watershed on or before the implemented date prescribed in the SWMP Implementation Schedule in Part III B.

i. For Construction Site Storm Water Runoff Control – See Items II.B.9.c and II.B.9.d.iv, see Construction Site Runoff, above. The Permittee must have developed, and implemented the provisions of this Public Education and Outreach on Storm Water Impacts and Public Involvement / Participation applicable to the technical provisions of the Construction Site Storm Water Runoff Control element.

j. The Permittee shall develop a training program for city employees regarding the reduction of pollutant runoff from municipal operations.

k. The Permittee shall involve the public in the development, submittal and implementation of the storm water management program.

l. The Permittee shall conduct an annual review and, if appropriate, revise this Public Education and Outreach on Storm Water Impacts and Public Involvement and Participation element to upgrade it to achieve the MEP standard.

C. AREA-SPECIFIC SWMP REQUIREMENTS.

Permit requirements for specific SWMPs are formulated to maintain or improve water quality standards. Section 401 review is initiated by a federal permit. Some of the activities mentioned in the permit (like areas of new development) may require a 401 Certification if they directly involve impacts to waters of the State (including wetlands). Structural practices should be placed on upland soils to the degree attainable as the installation of these and other devices may be subject to Section 404 of the Clean Water Act.

D. DEADLINES FOR PROGRAM COMPLIANCE.

As provided in Parts II, III and V, compliance with the SWMP shall be required, as indicated in the schedule, from the effective date of the permit. Permit deadlines govern SWMP deadlines. Regulatory deadlines govern permit deadlines.

E. ROLES AND RESPONSIBILITIES OF THE PERMITTEE.

The SWMP shall clearly identify the role and responsibility of the Permittee. Following the effective date of the permit, the SWMP portions developed and implemented must be included in the ANNUAL REPORT covering the permit year in which they were developed and implemented.

F. LEGAL AUTHORITY.

The Permittee has the authority to adopt and enforce ordinances for storm water quantity, quality and sediment reduction consistent with the South Carolina Pollution Control Act and the South Carolina Storm Water Management and Sediment Reduction Act. The Permittee shall review, develop and update local ordinances as needed to comply with this permit. It is expected that all legal authority to carry out the provisions of this permit be adopted by City Council within 18 months of the Effective Date of this permit. The Permittee shall continue to enforce the existing City of Columbia Storm Water Ordinance in the interim. In the case of new Permittees included after a permit modification, the Permittee shall ensure legal authority to control discharges to and from the MS4 over which it has jurisdiction one year after the permit has been modified to reflect the new Permittee inclusion.

This revised ordinance must provide the Permittee with adequate legal authority to accomplish items 1 through 8 below.

1. Control the contribution of pollutants to the MS4 by illicit discharges or improper disposal and identify storm water discharges associated with industrial activity within the permitted areas, control the Permittee's compliance status with NPDES regulations, and control the quality of storm water discharged from sites of industrial activity;

2. Prohibit illicit discharges to the MS4;

3. Prevent, contain and respond to the discharge of spills and the dumping or disposal of materials other than storm water into the MS4;

4. Control the contribution of pollutants from one portion of the MS4 to another;

5. Require compliance with conditions in ordinances, permits, contracts or orders;

6. Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance with permit conditions;

7. Demonstrate the Permittee's ability to control through agreements with other MS4 the contributions of pollutants to and from neighboring MS4; and,

8. Must include specific requirements to control construction, industrial and post-construction discharges of pollutants in storm water. Should include authority to enforce, penalize, stop work, require compliance, etc. for controlling pollutants from these sources.

G. SWMP RESOURCES.

The Permittee must secure adequate funding to ensure compliance with this permit and implementation of the SWMP. The Permittee is required to provide a fiscal analysis for the Permittee's program implementation, both for the past calendar year and the next in an ANNUAL REPORT as described in Part V.C. of this permit. The required analysis shall indicate budgets and funding sources as required in 122.26(d)(2)(vi) and 122.42(c)(3) and (5).

H. SWMP REVIEW AND MODIFICATION

1. Program Review:

The Permittee shall conduct an annual review of the current Storm Water Management Program (SWMP) in conjunction with preparation of the ANNUAL REPORT required under Part V.E. of the permit. Additional policy and technical guidance on the process of evaluating MEP for MS4 permits should be evaluated by the Permittee for SWMP requirements. See Appendix III.

2. Program Modification:

The Permittee may modify the SWMP during the life of the permit in accordance with the following procedures:

a. Modifications adding (but not subtracting nor replacing) components, controls, or requirements to the approved SWMP may be made by the Permittee at any time. A description of the modification shall be included within the subsequent ANNUAL REPORT.

b. Modifications replacing an ineffective or infeasible BMP specifically identified in the SWMP with an alternate BMP may be made by the Permittee at any time. A

description of the replacement BMP shall be included in the subsequent ANNUAL REPORT along with the following information:

i. an analysis of why the former BMP was ineffective or infeasible (including cost prohibitive);

ii. expectations on the effectiveness of the replacement BMP; and

iii. an analysis of why the replacement BMP is expected to achieve the goals of the BMP which was replaced.

c. Modifications to adjust the schedule for maintenance activities or the frequency of inspections or monitoring identified in the SWMP may be made by the Permittee at any time. The Permittee must include in the subsequent ANNUAL REPORT a description of the schedule adjustment along with the following information:

i. an analysis of why the former schedule was ineffective or infeasible;

ii. expectations on the effectiveness of the replacement schedule; and

iii. an analysis, if applicable, of why the replacement schedule will ensure the optimization of equipment use.

d. Modifications subtracting components, controls, or requirements of the SWMP may not be made by the Permittee unless it can be clearly demonstrated that with the elimination of this component, the SWMP will continue to achieve a reduction in pollutants to the MEP and shall not cause or contribute to violations of the South Carolina Pollution Control Act and Water Quality Classification and Standards. Within thirty business days from receipt of such request, SCDHEC will respond to the Permittee with either approval, disapproval, or time schedule for response. In the case where this type of modification is requested, the Permittee may not make the required modification until SCDHEC Bureau of Water written approval has been obtained. The subsequent ANNUAL REPORT, shall include, along with a copy of SCDHEC Bureau of Water approval letter, a description of the component which has been eliminated along with the following information:

i. an analysis of why the component was ineffective or infeasible,

ii. justification that the elimination of the component will neither cause a transfer of contaminants to ground water, nor contribute to exceed standards, and,

iii. a detailed explanation of why, with the elimination of this component, the SWMP will continue to achieve a reduction in pollutants to the MEP and should not cause or contribute to violations of the South Carolina Pollution Control Act Chapter 1 Title 48 of the Code of Laws of South Carolina.

e. Modifications included within the ANNUAL REPORT shall be signed in accordance with Part VI.H.

3. <u>Transfer of Ownership, Operational Authority, or Responsibility for Storm Water Management Program Implementation:</u>

The Permittee shall implement the SWMP on all new areas added to its portion of the Municipal Separate Storm Sewer System (or for which the Permittee become responsible for implementation of storm water quality controls) as expeditiously as practicable. Implementation of the program in any new area shall consider the plans in the SWMP of the previous MS4 ownership.

PART III. - SCHEDULES FOR PERMIT IMPLEMENTATION AND COMPLIANCE

A. WATERSHED MANAGEMENT.

The SWMP requirements of this permit will be developed in Year One and implemented in four (4) phases in each of the next four (4) years of the permit. Each phase corresponds to increments of the square miles of watershed indicated below. The prioritization of the work is based on the Part 1 and Part 2 application, the SC watershed strategy, the degree of urbanization in the watershed, water quality concerns and logistics. Each watershed designation comprises the twelve-digit hydrologic unit code as derived from the United States Geological Survey (USGS.) and the United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) and the approximate area of the watershed basins. See Appendix IV of this permit for a map of watershed management units (WMUs) and Hydrologic Units.

NPDES MS4 Permit SCS790001 – City of Columbia - Watershed Management

Phase	Watershed	Contained Waterbodies	Hydrologic Unit Code
I	Lower Saluda River Watershed	Saluda River, Stoops Creek, Kinley Creek	03050109-210
II	Congaree River Watershed	Rocky Branch, Congaree River, Reeder Mill Branch	03050110-010
III	Broad River Watershed	Broad River, Smith's Branch, Crane Creek, Nicholas Creek	03050106-07
IV	Gills Creek Watershed	Gills Creek, Penn Branch, Wildcat Creek, Kilbourne Creek	03050110-030

B. SWMP IMPLEMENTATION

The implementation of SWMP components will be done progressively by watershed areas within the four defined Phases, as described above in Section III.A., Watershed Management. This means that each year, only certain SWMP components have been implemented within certain watersheds. Each year, additional SWMP components have been added and will continue to be newly implemented within certain watersheds, by Phase, until all SWMP components are fully implemented in all watersheds. When full implementation is attained on the Expiration Date of this permit, all watersheds will report every year.

NPDES MS4 Permit SCS790001 – City of Columbia - SWMP Implementation Schedule

Year	Phase	Watershed HUC	Submitted	Implemented	Reported
1	---	See Note **(1)** Below	Effective Date + 6 months	Effective Date + 1 year	Effective Date + 18 months
2	I	03050109-210	Effective Date + 15 months	Effective Date + 2 years	Effective Date + 30 months
3	II	03050110-010	Effective Date + 27 months	Effective Date + 3 years	Effective Date + 42 months
4	III	03050106-07	Effective Date + 39 months	Effective Date + 4 years	Effective Date + 54 months **(2)**
5	IV	03050110-030	Effective Date + 51 months	Effective Date + 5 years	Effective Date + 66 months*

(*) Beyond the expiration date of the permit

NOTE 1: During the first year of the permit cycle, the Permittee will update the SWMP and develop programs, processes, procedures, and ordinances necessary to implement the SWMP in the four (4) phases described in the table in Part II A. Where specific dates are provided in the permit for implementation, the latter of the specified date and the implemented date will prevail.

NOTE 2: The fourth year annual report is part of the reapplication process. Adjustments to the SWMP and to the monitoring plan for the next 5 yr. Permit cycle must be proposed through this annual report.

PART IV. NUMERIC EFFLUENT LIMITATIONS, TOTAL MAXIMUM DAILY LOADS (TMDL), WASTE LOAD ALLOCATIONS (WLA) AND IMPAIRED WATERS - CWA 303(d)

A. NUMERIC EFLUENT LIMITATIONS.

There are no numeric effluent limitations at the time of permit issuance. Should the need arise for an effluent limitation, a permit modification may be necessary and the permit can be reopened according to Part VII. The permit modification should reflect the terms of compliance with the effluent limitation(s) imposed. Numeric effluent limitations, when determined by the SCDHEC to be necessary, will be imposed by modification of this permit in accordance with SC Regulation 61-9.

B. TOTAL MAXIMUM DAILY LOADS (TMDL).

TMDL in effect at the time of permit issuance are incorporated in this permit. The most recent version of the State of South Carolina Section 303(d) List contains a list of impaired waters within the State of South Carolina. Upon written notification from the Department that a TMDL is approved for any water body into which the Permittee discharges, if such discharges from the MS4 are not meeting the TMDL waste load allocations (WLA), this permit requires that the SWMP identified in Part II be modified by the Permittee per part IV.D, E, and F and part V below to implement the TMDL within a time frame consistent with the permit, focused on the ultimate goal of meeting the WLA. Achieving WLA is expected. Iterative improvements to the SWMP might be necessary to achieve WLA. Permittee must continually assess and upgrade controls to achieve MEP. The monitoring plan and results of the previous year's monitoring program are to be submitted with each annual report.

C. IMPAIRED WATER BODIES (303(d) LIST)

The SWMP will address discharges to impaired water bodies in the 303(d) list per the schedule described in Part III, IV.F, and V.A. The most recent version of the State of South Carolina Section 303(d) List contains a list of impaired water bodies within the State of South Carolina.

By the implemented date for each watershed listed in the schedule described in part III, the Permittee shall start implementation of a plan to determine whether storm water discharges from the regulated MS4 contribute to an impairment listed in the Section 303(d) List. If the Permittee determines that storm water discharges from the regulated MS4 contribute to an impairment, the Permittee shall implement, or cause to implement, BMP to address the pollutant of concern to the MEP, in order to reduce the discharge of pollutants to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act (CWA) in accordance to the schedule in part III.B, IV.F and V.A.

D. CONSISTENCY WITH TMDL WASTE LOAD ALLOCATIONS (WLA)

This permit is protective of water quality; hence, the permittee is required to be consistent with the assumptions and requirements of any applicable WLA for NPDES point source discharges prepared by SCDHEC and approved by EPA. Part V, MONITORING AND REPORTING REQUIREMENTS, requires the permittee to perform effluent and / or ambient monitoring necessary to demonstrate the level of progress being made toward meeting applicable WLA in TMDL and addressing impairments in waterbodies where the MS4 discharges during the term of the permit. The monitoring plan and results of the previous year's monitoring program are to be submitted with each annual report.

E. Should applicable WLA prescribed in TMDL approved for waterbody(ies) receiving drainage from permitted areas of the watershed, be either more rigorous, or more stringent than the conditions of this permit, the Permittee shall be responsible for implementation of applicable WLA for NPDES point sources for meeting the WLA. Implementation of the TMDL shall consist of incorporating into the SWMP measures to reach the goal of the TMDL and a schedule to accomplish the measures, with the schedule becoming a part of the permit requirements. The TMDL requirements shall be incorporated into the first SWMP update submitted during the budget year approved after TMDL issuance. When the TMDL approved date falls after December 1, the requirements should be included in the SWMP update contained in the annual report for the subsequent year.

F. The SWMP update for WLA / TMDL and impaired waters 303(d) implementation shall:

1. Report results of effluent sampling conducted in accordance to 122.21(g)(7) and analyzed for the pollutant of concern with analytical methods approved under 40 CFR Part 136. When no analytical method is approved, the applicant may use any method suitable to SCDHEC Bureau of Environmental Services but must provide a description of such method;

2. Revise, if necessary, the following the assessment of controls to include,

a. public participation and coordination;

b. the management practices, control techniques and system, design and engineering methods, and such other provisions which are appropriate;

c. description of staff and equipment available to implement the TMDL;

d. controls the Permittee may impose on a system-wide, watershed, jurisdictional, or individual outfall basis;

e. Estimated reductions in loadings of the pollutant of concern in from MS4 discharges expected as a result of implementing the SWMP update; and,

f. The assessment shall also identify known impacts of stormwater controls on ground water.

3. Include a summary of data, including monitoring data and BMP performance, that is accumulated from the previous SWMP update; and,

4. Identification of water quality improvements.

G. Should there be no progress made towards the pollution reduction goal of the TMDL by the Permittee within twenty four calendar months of the TMDL insertion in the SWMP, SCDHEC may either require the Permittee to implement different or additional BMP or impose effluent limitations for discharges not in compliance with TMDL pollution reduction efforts in accordance with Part VII of this permit.

PART V. - MONITORING AND REPORTING REQUIREMENTS

A. MONITORING REQUIREMENTS.

During the first year from the Effective Date of this permit, the Permittee will develop a monitoring plan to perform water quality monitoring with the overall objective of identifying sources of pollutants associated with a TMDL and/or impairment, identify appropriate BMP to address those sources, and to demonstrate progress towards reducing and/or eliminating those sources. The monitoring plan will be submitted to the SCDHEC for review as part of the Annual Report.

The monitoring plan will be prepared by the Permittee and will be consistent with the watershed schedule in Part III. The plan will address existing TMDL and discharges to 303(d) impaired waters (See Appendix I). The plan will be implemented to the MEP, to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act (CWA). Monitoring results will be submitted every annual report.

For the purpose of monitoring, "four seasons" are defined as:

i. Fall, also known as Autumn, from September 22 to December 21;

ii. Winter, from December 22 to March 21;

iii. Spring, from March 22 to June 21; and,

iv. Summer, from June 22 to September 21.

a. Permittee is required to perform effluent monitoring in all "Major municipal separate storm sewer outfalls" discharging in the TMDL / impaired watershed and / or ambient monitoring for the pollutant of concern necessary to demonstrate compliance with the WLA during the four seasons during the term of the permit. Monitoring data shall be of sufficient frequency to determine statistically significant seasonal pollutant loadings. Monitoring results and analysis will be submitted every annual report.

b. For waters subject to TMDL, in lieu of part V.A.a above, the Permittee may perform the monitoring necessary to demonstrate compliance with the WLA by collecting data on the actual effectiveness of deployed BMP in achieving the WLA. Monitoring data shall be of sufficient frequency to be statistically significant with respect to seasonal

pollutant loading variation in order to determine if the performance of stormwater BMP is adequate to meet the WLA. Monitoring can entail a number of activities including; but not limited to, outfall monitoring to in-stream monitoring to modeling. Monitoring data so collected shall be used for revised management measures as well as other purposes. Monitoring results and analysis will be submitted every annual report. The monitoring data shall be used in the iterative process to demonstrate the level of progress being made toward meeting applicable WLA in TMDL and addressing impairments in waterbodies where the MS4 discharges. After monitoring results are carefully considered, the Permittee shall ascertain if the SWMP and the mix of BMP need to be modified to comply with wasteload allocations.

c. For waters subject to TMDL, in lieu of part V.A.a and / or .b above, the Permittee may implement BMP proven to be effective in attaining the WLA in storm water discharges to TMDL waters, as demonstrated in parts V.A.a and /or .b in similar TMDL and also in 303(d) water bodies impaired for the same pollutant of concern. Monitoring of sufficient frequency to statistically corroborate the duplication and / or enhancement of the environmental benefit through seasonal pollutant loading variation will be required for two years immediate following BMP, or mix of BMP deployment in a representative watershed.

d. Progress toward the WLA is expected during the term of this permit.

e. Should attainment of the goal of actually meeting the WLA extend beyond the permit term in spite of demonstrated progress, meeting the WLA will be incorporated for the permit renewal. See Part VII.A of this permit.

B. BMP PERFORMANCE

1. Conditions of receiving waters, specific concerns, consistency with watershed plans, pollutant reduction goals expected from pollution control strategies and load reduction effectiveness expected from selected / proposed BMP must be stated. For waters that are not subject to a wasteload allocation (WLA), the goal is to ensure that discharges do not cause or contribute to excursions of water quality standards.

a. BMP effectiveness should strive to meet the WLA. BMP effectiveness shall be evaluated and BMP shall be refined / upgraded where monitoring demonstrates that the WLA is not being met.

b. Successive iterations of the BMP to reach the pollution reduction goals will be driven by the objective of meeting WLA.

c. Permittee must implement the WLA to the MEP.

2. The Permittee will use the results of the monitoring program to help identify, assess, and reduce or eliminate the source of any potential pollutants and, when performed in a watershed with an established TMDL, as a means of demonstrating compliance with the WLA. Seasonal pollutant loading data obtained in V.A. above will be used for these assessments.

3. The plan will include detailed information such as the goal of the plan, proposed analyses for testing, analytical testing/methods, sample chain-of-custody forms, laboratory certifications, proposed types of field sampling techniques such as grab or automatic sampling with associated field equipment, plans for sampling dry/wet weather conditions, and number of storm events. The plan will also include mapping of the subject watershed outlining proposed sample locations.

4. The Permittee will provide information characterizing the quality and quantity, if appropriate, of measured discharges in addition to adhering to all of the following:

i. A description shall be provided of the date and duration of the storm event(s) sampled, rainfall estimates of the storm event which generated the sampled discharge, the approximate volumetric flows during the event, and the duration between the storm event sampled and the end of the previous measurable storm event.

ii. Quantitative data for each pollutant will be analyzed under analytical methods approved under 40 CFR Part 136 by a lab certified to perform the analyses by the SCDHEC Bureau of Environmental Services (SCDHEC BES) unless otherwise specified. When no analytical method is approved, the Permittee may use any suitable method but must provide a description of the method.

iii. Based on the results of the sampling, the Permittee may modify details of the sampling plan after receiving approval from SCDHEC. This could include but it is not limited to the frequency of sampling, parameters to be sampled, and the type of sampling equipment to be used.

C. GENERAL REQUIREMENTS

Each of the following items is applicable to monitoring described under Part V of this Permit.

1. Each year, the sampling program shall be revised as appropriate and described by the submitted date, properly conducted and the results will be included in the ANNUAL REPORT. For the purposes of this permit, the location of each monitoring station shall be inventoried and identified on a map and in a database, included in the SWMP, and the ANNUAL REPORTS. In addition, the ANNUAL REPORT will include all measured analytical data inclusive of the reported date in part III.B.

2. The methods, parameters, and field techniques shall be in accordance with SC Regulation 61-9.122.26(d)(2)(iii)(A)(3). Records of all analytical results shall be maintained in accordance with Parts III.B and VI.R of this permit.

3. In accordance with Part VII.A, SCDHEC may modify the permit to allow or establish appropriate site specific sampling procedures or requirements, including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rain fall), protocols for collecting

samples under 40 CFR Part 136, that quantitative data shall be provided for additional parameters, and additional time for submitting data on a case-by-case basis.

4. The monitoring and sampling locations shall be selected such that SCDHEC can use the information collected in a useful manner to evaluate any trends in the reduction of pollutants loads discharged to waters of South Carolina during the term of the permit. Pollutant loading trends will be used to evaluate the effectiveness of the Permittee's SWMP to the MEP in order to reduce the discharge of pollutants to protect water quality and to satisfy the appropriate water quality requirements of the CWA.

5. When a discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit in lieu of sampling data, a description of why samples could not be collected, including available documentation of the event. Adverse climatic conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, etc.).

D. ANNUAL REPORT.

1. *Preparation and Submission.* The Permittee shall prepare an annual system-wide report to be submitted by the **Reported Date** for each Phase. Within 18 months of the Effective Date of this permit, the first annual report shall be submitted and subsequent annual reports every twelve months thereafter, when the Phases are fully implemented. The preparation and submittal of a system-wide report shall be coordinated and prepared by a member or designated representative from each municipal entity covered by this permit. The Permittee shall be responsible for providing information on the MS4 and for providing information for the system-wide report in a timely manner. The Permittee shall sign and certify the report in accordance with Part VI.H. & VI.I. of this permit, and shall include a statement or resolution that the Permittee's governing body or agency (or delegated representative) has reviewed or has been appraised of the content of the report.

2. The report shall include the following sections:

a. Contacts List

b. SWMP Evaluation

c. Summary Table

d. Narrative Report

e. Monitoring Section

f. Summary of SWMP and Monitoring Modifications

g. Fiscal Analysis

h. Any information required to be submitted by the reported date

i. Appendices

3. *Specific Requirements.* The following items describe in more detail the specific requirements for the report.

a. Provide a list of contacts and responsible parties (e.g.: agency, name, phone number) who had input to and are responsible for the preparation of the report.

b. Provide an overall evaluation of the SWMP including: Objective of Program; Major Findings (e.g.: water quality improvements or degradation); Major Accomplishments; Overall Program Strengths / Weaknesses; and Future Direction of Program.

c. Provide a Summary Table of SWMP Elements.

A Summary Table of appropriate SWMP annual activities for the Permittee shall be provided. The purpose of the Summary Table is to document in a concise form the program activities and Permittee's compliance status with quantifiable permit requirements. Program elements that are administrative (e.g.: planning procedures, program development and pilot studies) are inappropriate for the summary table and shall be discussed in the narrative section of the ANNUAL REPORT. The following are <u>examples</u> of SWMP activities to be included in the Summary Table:

i. <u>Structural Controls</u> - maintenance and/or inspection activities of existing structural controls

ii. <u>Areas of New Development and Significant Redevelopment</u> – description of watershed prioritization for developing watershed master plans

iii. <u>Roadway Maintenance</u> - street sweeping, litter control activities, and maintenance on storm water structures & roadside ditches

iv. <u>Flood Control Projects</u> – review of existing storm water master plans to assess water quality impacts on receiving water for all flood management projects identified in the master planning process

v. <u>Municipal Waste TSD Facilities</u> - inspections, monitoring, and implementation of control measures

vi. <u>Pesticide, Herbicide, and Fertilizer Application</u> - certification training and public education

vii. <u>Illicits</u> - facility inspections, investigations, enforcement actions, illicit (dry weather) screening, illicit public reporting, oil/household hazardous waste collection, and storm sewer inlet stenciling

viii. Industrial Facilities - inspection activities and monitoring

ix. Construction - training of inspectors, certification of construction site operators, inspections, and enforcement actions

x. Monitoring Program – storm water and ambient monitoring activities

xi. Public Education Program - Summary of public notification and education activity.

The Summary Table shall indicate the Permittee's SWMP activities and accomplishments. Items to be reported include:

i. Activity description;

ii. Number of activities (with frequency) that were scheduled for implementation and/or accomplishment in program element discussion (i.e., once/6 months, 100%/5 years, 6 sites monitored once/year, all sites inspected/permit term). Enter "Not Applicable" (N/A) if no specific schedule was specified;

iii. Status of schedule for year ("yes" for schedule was adhered to, or "no" for schedule was not adhered to);

iv. Number of activities which were accomplished; and

v. The availability of documentation (i.e., inspection reports) for those activities which were accomplished and comments describing the reason(s) for any non-compliance.

d. The report shall contain a Narrative Report to succinctly discuss the SWMP elements which were not included within the SWMP Summary Table. Those SWMP elements required to be developed under Parts II and III of this permit shall be discussed within this section of the report following development.

The Permittee shall include a brief discussion of the following applicable SWMP Elements:

i. Structural Controls Maintenance

ii. Development Planning Procedures

iii. Roadway Maintenance

iv. Flood Management

v. Municipal Facilities

vi. Pesticides, Herbicides, and Fertilizers

vii. Illicits Inspection/Investigation/Enforcement

a Inspection Ordinance and Enforcement Measures

b Dry Weather Field Screening Program

c Investigation of illicit discharges

d Spill Response

e Oil and Household Hazardous Waste

f Sanitary Sewer Seepage

viii. Industrial Facility Inspection

ix. Construction Planning Procedures and Inspections

x. Monitoring Activities

xi. Education Activities

xii. Any additional elements of SWMP

The format for the Narrative Report section of the report shall be a brief discussion of the SWMP Element. The aspects of the Permittee's activities concerning a SWMP Element shall be succinctly discussed in the section of the Narrative Report dedicated to that Element. The discussion shall include the following:

i. Objective of SWMP Element,

ii. SWMP Element activities completed and those in progress,

iii. General discussion of Element. Explanation of all Element activity deficiencies (e.g.: activities described in the program that have not been fully implemented or completed). Results of activities shall be summarized and discussed (e.g.: maintenance caused by inspection, pollutants detected by monitoring, investigations as a result of dry and wet weather screening, number and nature of enforcement items, education activities participation),

iv. Status of SWMP Element with respect to Parts II and III of the permit,

v. SWMP Element strengths and weaknesses,

vi. Assessment of controls, and

vii. Discussion of Element revisions that are summarized elsewhere in the report.

e. The report shall contain a Monitoring Section which discusses the progress and results of the monitoring programs required under Parts II, III and V of the permit.

1) The Monitoring Section of the report shall include a summary of the monitoring program developed and implemented under Part V of the permit. The details to be discussed include:

   i. Brief summary statement of the objective of each monitoring project included under the program,

   ii. Summary chart of the data from the monitoring completed,

   iii. Discussion of any results or conclusions derived from the monitoring completed,

   iv. Status of monitoring with respect to the compliance schedule in Part V.B of the permit, and

   v. Discussion of monitoring program revisions that are summarized elsewhere in the report.

2) The Monitoring Section of the report shall include the following information as required in Parts II, III and V of the permit.

f. Provide a summary of SWMP and monitoring modifications made during the permit year, including,

   1) A list of entities such as military bases, large hospitals, prison complexes, universities, sewer districts, highway departments and others that operate a separate storm sewer system and are located within your MS4 area. Indicate whether they are an integral part of your SMS4.

   2) An update for annexation, or de-annexation

g. Provide a complete fiscal analysis for the Permittee's program implementation, both for the past calendar year and the next. The analysis shall indicate budgets and funding sources as required in part II.G.

h. The following information shall be included as Appendices within the report for each watershed:

   1) Analytical data collected from the monitoring program.

   2) Results of illicit connections screening or dry weather screening.

   3) Any other data specifically requested by SCDHEC to substantiate statements and conclusions reached in any reports.

VI. - STANDARD PERMIT CONDITIONS

A. DUTY TO COMPLY.

The Permittee must comply with all conditions of this permit insofar as those conditions

are applicable. Any permit noncompliance by a Permittee constitutes a violation of the CWA and the SC Pollution Control Act and is grounds for enforcement action, for permit termination, revocation and re-issuance, or modification, or for denial of a permit renewal application for the non-complying Permittee.

B. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS.

1. Criminal

a. Negligent Violations, Knowing Violations, and Knowing Endangerment. The SC Pollution Control Act provides that any person who negligently violates permit conditions under Section 48-1-320 of the Act is subject to a fine of not less than $500 or more than $25,000 per day of violation, or by imprisonment for not more than 2 years, or both.

b. False Statement. The SC Pollution Control Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than 2 years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than $25,000 per day of violation, or by imprisonment of not more than 2 years, or by both. (See Section 48-1-340 of the SC Pollution Control Act).

2. Civil Penalties

The SC Pollution Control Act provides that any person who violates a permit condition under Section 48-1-330 of the Act is subject to a civil penalty not to exceed $10,000 per day of such violation.

C. DUTY TO REAPPLY.

If the Permittee wishes to continue an activity regulated by this permit after the permit expiration date, the Permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days prior to expiration of this permit. Reapplication should be submitted via year 4 annual report, see part III.B. It should include proposed adjustments to the SWMP and to the monitoring plan for the next 5-year term. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at SC Reg 61-9 122.6 and any subsequent amendments.

D. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance

with the conditions of this permit.

E. DUTY TO MITIGATE.

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. DUTY TO PROVIDE INFORMATION.

The Permittee shall furnish to the Director, within a time specified by the Director, any information which the Director may request to determine compliance with this permit. The Permittee shall also furnish to the Director upon request copies of records required to be kept by this permit.

G. OTHER INFORMATION.

When the Permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in any report to the Director, he or she shall promptly submit such facts or information.

H. SIGNATORY REQUIREMENTS.

All DMRs, SWMPs, reports, certifications or information either submitted to the Director or required to be maintained by the Permittee, shall be signed by:

1. Either a principal executive officer or ranking elected official; or

2. A duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described above and submitted to the Director, and

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new written authorization satisfying the requirements of this paragraph must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

I. CERTIFICATION.

Any person signing documents under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

J. PENALTIES FOR FALSIFICATION OF REPORTS.

Section 48-1-320 of the SC Pollution Control Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $25,000, or by imprisonment for not more than 2 years, or by both.

K. PENALTIES FOR FALSIFICATION OF MONITORING SYSTEMS.

The SC Pollution Control Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 48-1-320 of the Act.

L. OIL AND HAZARDOUS SUBSTANCE LIABILITY.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under section 311 of the Clean Water Act, section 106 of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), the SC Pollution Control Act, the SC Hazardous Waste Management Act, or the South Carolina Oil & Gas Act.

M. PROPERTY RIGHTS.

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion

of personal rights, nor any infringement of Federal, State or local laws or regulations.

N. SEVERABILITY.

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

O. FEDERAL/ENVIRONMENTAL LAWS.

1. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable Federal law or regulation under authority preserved by Section 510 of the CWA.

2. No condition of this permit shall release the Permittee from any responsibility or requirements under other environmental statutes or regulations.

P. PROPER OPERATION AND MAINTENANCE.

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit and with the requirements of storm water management programs. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by the Permittee only when necessary to achieve compliance with the conditions of the permit.

Q. MONITORING AND RECORDS.

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. The Permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of the reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

3. Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;

b. The initials or name(s) of the individual(s) who performed the sampling or

measurements;

c. The date(s) analyses were performed;

d. The time(s) analyses were initiated;

e. The initials or name(s) of the individual(s) who performed the analyses;

f. References and written procedures, when available, for the analytical techniques or methods used; and

g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

R. MONITORING METHODS.

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

S. INSPECTION AND ENTRY.

The Permittee shall allow the Director or an authorized representative of SCDHEC, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter the Permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

T. PERMIT ACTIONS.

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

U. ADDITIONAL MONITORING BY THE PERMITTEES.

If the Permittee monitors more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased monitoring frequency shall also be indicated on the DMR.

VII. - PERMIT MODIFICATION

A. MODIFICATION OF THE PERMIT.

The Permittee may request SCDHEC to reopen the permit to incorporate relevant elements of the Comprehensive Management Plan including, but not limited to, living resource targets and associated pollutant loading targets. If a permit modification is not requested during the term of this permit, elements of the plan will be considered for incorporation in the permit renewal. At any time, during the permit term, the permit will not be modified to include the relevant plan elements unless SCDHEC has previously agreed to incorporate consistent conditions in any permits or related rules and regulations that might affect the Permittee. In addition, the permit may be reopened and modified during the life of the permit to:

1. Address impacts on receiving water quality caused, or contributed to, by discharges from the MS4;

2. Address changes in State or Federal statutory or regulatory requirements;

3. Include the addition of a new Permittee who is the owner or operator of a portion of the MS4 located within the geographical boundaries of the existing permit;

4. Include additional Separate Storm Sewer(s) located adjacent to the geographical boundaries of the existing Permittees but under the jurisdiction of another MS4 to be consistent with the State watershed permitting approach;

5. Allow for the inclusion of Separate Storm Sewer(s) designated by the permitting authority; or,

6. Include other modifications deemed necessary by the Director to comply with the goals and requirements of the Clean Water Act.

All modification to the permit will be made in accordance with SC Regulation 61-9 122.62, 122.63, and 124.5.

B. MODIFICATION OF STORM WATER MANAGEMENT PROGRAM(S).

Only those portions of the SWMP specifically required as permit conditions shall be subject to the modification requirements of SC regulation 61-9 124.5. Replacement of an ineffective or infeasible BMP implementing a required component of the Storm Water Management Program with an alternate BMP expected to achieve the goals of the ineffective or infeasible BMP shall be considered minor modifications to the SWMP and not modifications to the permit. (See also Part II.G.) Modifications that are due to updates to documents incorporated by reference in the body of the permit, or to addition or deletion of items to appendices of this permit shall be considered minor modifications. SCDHEC Bureau of Water requires all major components of the SWMP plan to be included in the annual report. The Department reserves the initiative to modify this permit, or terms, conditions or schedule herein based on information contained in the annual reports or during a permit audit.

C. CHANGES IN MONITORED OUTFALLS.

This permit is issued on a system-wide basis in accordance with Clean Water Act

§402(p)(3)(i) and authorizes discharges from all portions of the MS4. Since all outfalls are authorized, changes in monitoring outfalls, other than those with specific numeric effluent limitations, if any, shall be considered minor modifications to the monitoring program and not modifications to the permit. (See also Part V.) Changes in monitoring outfalls with specific numeric effluent limitations shall be considered modifications to the permit and will be made in accordance with the procedures at SC Regulation 61-9 122.62.

VIII. - DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Unless otherwise specified in this permit, additional definitions of words or phrases used in this permit are as follows:

A. "Best Management Practices" ("BMP") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMP also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

B. "CWA" means Clean Water Act, also referred to as "the Act" (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq., as amended by the WQA of 1987, P.L. 100-4, the "Act."

C. "Director" means the SC Department of Health and Environmental Control, or an authorized representative.

D. "Discharge" for the purpose of this permit, unless indicated otherwise, refers to discharges from the Municipal Separate Storm Sewer System (MS4).

E. "Effective Prohibition" means to include requirements to effectively prohibit non-Storm Water discharges into the storm sewers CWA 402(p)(3)(B)(ii).

F. "Flow-weighted composite sample" means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge at the time of sampling.

G. "Illicit connection" means any man-made conveyance connecting a non-storm water discharge directly to a municipal separate storm sewer system.

H. "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and other discharges listed in Part II. A.7.a. of this permit.

I. "Industrial Land Use" means land utilized in connection with manufacturing, processing, or raw materials storage at facilities identified under SC Regulation 61-9 122.26(b)(14).

J. "Landfill" means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

K. "Large Municipal Separate Storm Sewer System" means all municipal separate storm sewers that are either:

i. located in an incorporated place (city) with a population of 250,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or

ii. located in the counties with unincorporated urbanized populations of 250,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or

iii. owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large municipal separate storm sewer system.

L. "Major municipal separate storm sewer outfall" or "Major outfall" is defined as follows:

- a pipe (or closed conveyance) system with a cross-sectional area equal to or greater than 7.07 square feet (e.g., if a single circular pipe system, an inside diameter of 36 inches or greater);

- a single conveyance other than a pipe, such as an open channel ditch, which is associated with a drainage area of more than 50 acres;

- a pipe (or closed conveyance) system, draining *"industrial land use,"* with a cross-sectional area equal to or greater than 0.79 square feet (e.g., if a single circular pipe system, an inside diameter of 12 inches or greater); or

- a single conveyance other than a pipe, such as an open channel ditch, which is associated with an *"industrial land use"* drainage area of more than 2 acres;

M. "Major Watershed" is defined as one or more hydrologic units as derived from the United States Geological Survey (USGS) and the United States Department of Agriculture (USDA-NRCS) with an area of approximately two hundred miles. There are four major watersheds to be managed by the Permittee as shown on Part III.A of this permit that can be defined as an area bounded peripherally by a water parting (i.e., ridge) and draining to a particular body of water, or basin. A major watershed shall encompass one or more named major water body or may consist of a coastal area draining directly into a bay. A major watershed may contain one or more "major

outfalls".

N. "Medium Municipal Separate Storm Sewer System" means all municipal separate storm sewers that are either:

i. located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or

ii. located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or

iii. owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the medium municipal separate storm sewer system.

O. "MEP" is an acronym for "Maximum Extent Practicable," the technology-based discharge standard for Municipal Separate Storm Sewer Systems established by CWA §402(p).

P. "MS4" is an acronym for "municipal separate storm sewer system" and is used to refer to either a Large or Medium Municipal Separate Storm Sewer System (e.g. "the City of Columbia MS4").

Q. "Municipal Separate Storm Sewer" means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and storm drains):

i. owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State Law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian Tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;

ii. designed or used for collecting or conveying storm water;

iii. which is not a combined sewer; and

iv. which is not part of a Publicly Owned Treatment Works (POTW) as defined at SC Regulation 61-9 122.2.

R. "Permittee" means each individual co-applicant for an NPDES permit who is only responsible for permit conditions relating to the discharge that they own or operate. (Also, See SC Regulation 61-9 122.2)

S. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

T. "State Water Quality Standards", is defined in Water Classification and Standards, SC Regulation 61-68, and Classified Waters, SC Regulation 61-69 and Sections 48-1-10, et seq., of the South Carolina Code.

U. "Storm Sewer", unless otherwise indicated, refers to a municipal separate storm sewer.

V. "Storm Water" means storm water runoff, snow melt runoff, surface runoff and drainage.

W. "Storm Water Discharge Associated with Industrial Activity" is defined at SC Regulation 61-9 122.26(b)(14).

X. "Storm Water Management Program" refers to a comprehensive program to manage the quality of storm water discharged from the municipal separate storm sewer system. For the purposes of this permit, the Storm Water Management Program is considered a single document, but may actually consist of separate programs (e.g. "chapters") for each Permittee.

Y. "SWMP" is an acronym for "Storm Water Management Program."

Z. "Time-weighted composite" means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

AA. "Total Maximum Daily Load (TMDL)" means a process to establish the allowable load of pollutants or other quantifiable parameters for water bodies that do not meet designated uses under technology based pollution controls. The TMDL process is based on the relationship between pollution sources and in stream water quality conditions. In restoring and maintaining the quality of SC water resources, SCDHEC is developing TMDL for water bodies whose designated uses are impaired as defined in 40 CFR 130 and Section 303(d) of the Clean Water Act. TMDL can be established in response to point or nonpoint sources of pollution and are pollutant specific, and, water body specific.

Factors considered in establishing a TMDL for an affected water body include its classification, the water quality standard which has been violated, the criteria used to determine the violation, and the degree of impairment.

Technically, the process of establishing a TMDL involves target identification, source assessment, a linkage between target and sources, load calculation, TMDL development, and an implementation strategy. A target value is identified based on applicable water quality standards. The sources of the pollutants of concern, including both point and nonpoint sources, are assessed. Dischargers, potential nonpoint sources,

land use patterns, stream flow, and, climatological data are used in the TMDL analysis. By quantifying the various pollutant contributions in the watershed and analyzing the fate and transport of the pollutant through the watershed, the pollutant load is calculated. The assimilative capacity of the water body for the pollutant of concern is determined based on SC. The TMDL is based on the assimilative capacity plus a MOS (margin of safety). The TMDL is then allocated between point and nonpoint sources. The TMDL is implemented through all mechanisms available to SCDHEC and State and local entities to effectively address the source of impairment. SCDHEC EQC local district offices, BOW enforcement, SRF loans, NPDES permits (individual and general including MS4s), and public education efforts will be intertwined in a strategy geared toward abating the sources of impairment, and attaining the intended use of the water body.

BB. "Waters of the State" is defined at SC Regulation 61-9 122.2.

CC. "Watershed Water Quality Management Strategy" The interdependence of water quality and all the activities that occur in the associated drainage basin is affirmed through this approach. For the purposes of this program, South Carolina is divided into 5 major drainage basin groupings. NPDES permitting, among other activities, is performed for each basin during each five-year cycle. The current NPDES permitting cycle for each basin is presented next:

Drainage Basin	FFY10	FFY11	FFY12	FFY13	FFY14
Savannah Salkehatchi (01)	---	---	---	NPDES Permitting	---
Saluda Edisto (02)	---	---	---	---	NPDES Permitting
Catawba Santee (03)	NPDES Permitting	---	---	---	---
Pee Dee (04)	---	NPDES Permitting	---	---	---
Broad (05)	---	---	NPDES Permitting	---	---

SCDHEC's watershed managers focus on identifying sources of water quality problems in each basin. The watershed managers work closely with local governments, lake and river associations, industry representatives, and state and federal agencies to implement water quality improvement and prevention strategies.

IX. - APPENDICES

Appendix Number	Appendix Name
I.	Map of Watersheds Indicated by Hydrologic Unit Code (HUC-12) With a List of TMDL and Impaired Water Bodies Under Sections 303(d) of the Clean Water Act for City of Columbia, South Carolina
II.	RESERVED
III.	MS4 Program Evaluation Guidance, Technical Publication No: EPA-833-R-07-003

APPENDIX I.

Map of Watersheds Indicated by Hydrologic Unit Code (HUC-12) with a List of TMDL and Impaired Water Bodies Under Sections 303(d) of the Clean Water Act for City of Columbia, South Carolina.

BASIN8	HUC-12	COUNTY	STATION	DESCRIPTION	USE	CAUSE
BROAD	030501060708	RICHLAND	B-337	BROAD RVR AT US 176 (BROAD RIVER RD) IN COLUMBIA	AL	CU
BROAD	030501060708	RICHLAND	B-280	SMITH BR AT N MAIN ST (US 21) IN COLA	AL	BIO
SALUDA	030501100301	LEXINGTON	CSB-001R	CONGAREE RVR AT BLOSSOM ST (BROAD RIVER)	REC	FC
SALUDA	030501100301	LEXINGTON	CSB-001L	CONGAREE RVR AT BLOSSOM ST (SALUDA RIVER)	REC	FC
SALUDA	030501100301	RICHLAND	B-080	BROAD RIVER DIVERSION CANAL AT COLA WATER PLANT	REC	FC
SALUDA	030501091403	LEXINGTON	S-260	KINLEY CK AT S-32-36 (ST. ANDREWS RD) IN IRMO	AL	BIO
SALUDA	030501100301	LEXINGTON	C-007F	CONGAREE RIVER @ ST HWY 378	FISH	HG
SALUDA	030501100301	RICHLAND	C-007A	CONGAREE RIVER @ BARNEY JORDAN RAMP	FISH	HG
SALUDA	030501100203	RICHLAND	C-017	GILLS CK AT SC 48 (BLUFF ROAD)	AL	DO
SALUDA	030501100203	RICHLAND	C-017	GILLS CK AT SC 48 (BLUFF ROAD)	REC	FC
SALUDA	030501100203	RICHLAND	C-001	GILLS CK AT BRDG ON US 76 (GARNERS FERRY ROAD)	REC	FC
SALUDA	030501100304	RICHLAND	C-073	REEDER POINT BR AT SC 48	REC	FC
BROAD	030501060707	RICHLAND	B-316	CRANE CK AT S-40-43 UNDER I-20 - N COLA	AL	DO

APPENDIX II.

[RESERVED]

APPENDIX III.

MS4 Program Evaluation Guidance

Technical Publication No:

EPA-833-R-07-003